WHAT IS CLAIMED IS:

1. An ink jet recording apparatus provided with a CPU having plural modes including a mode to reduce the power consumption by suspending the clock signal as an operational mode, and receiving signal from power switching means as NMI interrupt signal for the execution of NMI interrupt process, comprising:

non-volatile memory means for retaining a power supply status flag;

user logic circuit means for outputting trigger signal;

a mask signal generating portion for receiving said trigger signal to generate NMI interrupt mask signal;

a gate circuit for making said signal from power switching means invalid by said mask signal; and

control means for initiating the operation of the recording apparatus in accordance with said flag at the time of the execution of said NMI interrupt process by the input of signal from said power switching means, changing said flag, changing the operational mode of said CPU, and setting said user logic circuit means to prohibit the NMI interrupt until said operation is completed, and enabling said user logic circuit means to output said trigger signal in accordance with said setting, and said mask

signal generating portion to generate said mask signal for making signal from said power switching means invalid.

2. An ink jet recording apparatus according to Claim 1, wherein if said flag is ON, the power supply OFF is operated as said operation to change said flag to OFF, and as the operational mode change of said CPU, the clock signal is suspended and the mode is changed to the one for reducing the power consumption.

3. An ink jet recording apparatus according to Claim 2, wherein said power supply OFF operation includes the capping operation to protect the recording head mounted on said ink jet recording apparatus.

4. An ink jet recording apparatus according to Claim 1, wherein if said flag is OFF, the power supply ON is operated as said operation to change said flag to ON, and as the operational mode change of said CPU, the clock signal is suspended and the mode is changed from the one for reducing the power consumption.

5. An ink jet recording apparatus according to Claim 4, wherein said power supply ON operation

includes the recovery operation for recovering the recording head mounted on said ink jet recording apparatus.

6. An ink jet recording apparatus provided with a CPU having plural modes including a mode to reduce the power consumption by suspending the clock signal as an operational mode, and executing the NMI interrupt process with the input of signal from power switching means as NMI interrupt signal, comprising:

abnormality detection means for detecting abnormality;

user logic circuit means for outputting trigger signal;

a mask signal generating portion for receiving said trigger signal to generate NMI interrupt mask signal;

a gate circuit for making said signal from power switching means invalid by said mask signal; and

control means for setting the prohibition of said NMI interrupt for said user logic circuit means in accordance with abnormal signal from said abnormality detecting means, and outputting said trigger signal in accordance with said setting to enable said mask signal to be output from said mask signal generating portion to said gate circuit in

accordance with said output trigger signal for making signal from said power switching means invalid.

7. An ink jet recording apparatus according to Claim 6, further comprising:

a second abnormality detection means, wherein said gate circuit further executes the logical operation of abnormal signal from said second abnormality detection means.

8. An ink jet recording apparatus according to Claim 6, wherein said abnormality detection means detects the abnormal temperature rise of the recording head mounted on said ink jet recording apparatus.

9. An ink jet recording apparatus according to Claim 7, wherein said second abnormality detection means detects the excessive voltage of the power supply provided for said ink jet recording apparatus.

10. An ink jet recording apparatus according to Claim 1, wherein said recording head is provided with a plurality of recording members including an electrothermal converting element for generating thermal energy as energy for discharging ink.

11. An ink jet recording apparatus provided with a CPU having plural modes including a mode to reduce the power consumption by suspending the clock signal as an operational mode, and input means for inputting signal from power supply switching means as NMI interrupt signal for executing the NMI interrupt process, comprising:

user logic circuit means for outputting signal;

a mask signal generating portion for receiving said trigger signal to generate NMI interrupt mask signal;

a gate circuit for making said signal from power switching means invalid by said mask signal; and

control means for setting the prohibition of said NMI interrupt for said user logic circuit means when the said NMI interrupt signal is inputted by said input means for a designated number subsequent to said NMI interrupt process executed by the input of said signal from said power switching means, and enabling said user logic circuit means to output said trigger signal in accordance with said setting, and said mask signal generating portion to generate said mask signal in accordance with the output of said trigger signal for making signal from said power switching means invalid.

12. A method for controlling an ink jet recording apparatus provided with a CPU having plural modes including a mode to reduce the power consumption by suspending the clock signal as an operational mode, and executing NMI interrupt process with the input of signal from power switching means as NMI interrupt signal, comprising the following steps of:

retaining a power supply status flag on non-volatile memory means;

outputting trigger signal from user logic circuit means; and

generating mask signal in the NMI interrupt signal generating portion for the NMI interrupt when said trigger signal is received, wherein

the operational process of the ink jet recording apparatus is executed in accordance with said flag retained in said flag retaining step when said NMI interrupt process is executed by signal from said power switching means, and said flag retained in said flag retaining process is updated in said trigger signal outputting step for outputting trigger signal in accordance with the setting for said user logic circuit, and mask signal is generated in said mask signal generating step in accordance with said trigger signal for making signal from said power switching means invalid by the generation of said

mask signal until said operational process is completed.

13. A method for controlling an ink jet recording apparatus according to Claim 12, wherein if said flag is ON, said operation is an operational process of the power supply OFF, and said flag is changed to suspend the clock signal as the operational mode change of said CPU for changing the mode to the one for reducing the power consumption.

14. A method for controlling an ink jet recording apparatus according to Claim 13, wherein said power supply OFF operation process includes the capping process to protect the recording head mounted on said ink jet recording apparatus.

15. A method for controlling an ink jet recording apparatus according to Claim 12, wherein if said flag is OFF, said operation is an operational process of the power supply ON, and said flag is changed to suspend the clock signal as the operational mode change of said CPU for changing the mode from the one for reducing the power consumption.

16. A method for controlling an ink jet recording apparatus according to Claim 15, wherein

said power supply ON operation process includes the recovery process for recovering the recording head mounted on said ink jet recording apparatus.

17. A method for controlling an ink jet recording apparatus provided with a CPU having plural modes including a mode to reduce the power consumption by suspending the clock signal as an operational mode, and executing NMI interrupt process with the input of signal from power switching means as NMI interrupt signal, comprising the following steps of:

detecting abnormality by abnormality detection means;

retaining a power supply status flag on non-volatile memory means;

outputting trigger signal from user logic circuit means; and

generating mask signal in the NMI interrupt signal generating portion for the NMI interrupt when said trigger signal is received, wherein

abnormality is detected in said abnormality detecting step to output said trigger signal in said trigger signal outputting step in accordance with said abnormality, and said mask signal is generated in said mask signal generating step in accordance with said output trigger signal for making signal

from said power switching means invalid by said generated mask signal.

18. A method for controlling an ink jet recording apparatus according to Claim 17, further comprising:

a second abnormality detecting step for detecting abnormality by second abnormality detection means, wherein

said second abnormality detection means detects abnormality, and abnormality detection means outputs signal to said gate circuit.

19. A method for controlling an ink jet recording apparatus according to Claim 17, wherein the abnormal temperature of the recording head mounted on said ink jet recording apparatus is detected in said abnormality detecting step.

20. A method for controlling an ink jet recording apparatus according to Claim 17, wherein the excessive voltage of the power supply provided for said ink jet recording apparatus is detected in said second abnormality detecting step.

21. A method for controlling an ink jet recording apparatus according to Claim 12, wherein

said recording head is provided with plural recording members including an electrothermal converting element for generating thermal energy as energy for discharging ink.

22. A method for controlling an ink jet recording apparatus provided with a CPU having plural modes including a mode to reduce the power consumption by suspending the clock signal as an operational mode, and input means for inputting signal from power switching means as NMI interrupt signal, comprising the following steps of:

deciding whether or not said NMI interrupt signal is inputted into said input means for a designated number;

outputting trigger signal from user logic circuit means; and

generating mask signal in the NMI interrupt signal generating portion for the NMI interrupt by receiving said trigger signal, wherein

the NMI interrupt prohibition is set for said user logic circuit means when the input of said NMI interrupt signal is made in the designated number in said determining step subsequent to said NMI interrupt process executed by the input of signal from said power switching means, the trigger signal is output in said trigger signal generating step in

accordance with said setting to user logic circuit means for generating mask signal in said mask signal generating step in accordance with the output of said trigger signal.